

continuous trunk line being formed, or would a line to give access from Nelson towards Southland have to lead in oblique and even transverse directions in particular parts of the island?—Certainly, a main trunk line in the South Island must cross the mountains once for physical reasons. The natural passage between Nelson and Southland would cross from the West Coast to the interior of the Province of Otago, either by the Womaka or Wakatipu Lakes. By this route all the formidable shingle rivers on the east side of the island would be avoided, and the mountains crossed at the lowest altitude (under 2,000 feet). The line would cross through mineral bearing country throughout its entire length, and therefore might be adopted for the purpose of opening up country, but it would not be suitable as a line of through communication, as it would not connect the principal settlements.

2. Would this also be the case in the North Island?—The North Island is more suited to a central railway line, with branches radiating to each coast, than is the case in the South Island.

3. Does it not appear to you that the sea will subserve the purposes of trunk communication, and that transverse lines will, for a long period, be more suited than longitudinal lines?—

4. Would you indicate the districts which, in your opinion, present the greatest natural difficulties to railway communication, stating whether these difficulties are in lines generally longitudinal, or transverse, with respect to the direction of the island?—As a general rule, in Otago and Nelson it would be easier to construct North and South lines, owing to the direction of the rivers; but, in the central districts of the South Island, transverse lines could be made with less outlay at first. In the South Island, as a rule, the country occupied by the palæozoic rocks (coloured stone grey on the geological maps) is the worst for railway communication owing to the steep and complicated character of the valleys, and the large amount of shingle by which they are always occupied. In the North Island, the same formation forms a ridge from Cape Terawitite to Cape Colville, which would present the same difficulties; but there is an additional formation in the North Island, wanting in the South, that would be very formidable; namely, the pumice plains in the interior which have no regular system of drainage, being intersected by deep ravines, which no engineer can avoid without great expense. This region is principally in the interior, and towards the west coast at Kawhia.

5. Assuming it to be desired to undertake, within the next ten years, a trunk line of railway through the Middle Island, as part of a general line of communication from North to South of New Zealand, what line do you think should be adopted?—If the object of such a line be merely to facilitate through communication, it must necessarily follow the shortest route available for connecting the centres of population and the densely settled districts, even if the engineering difficulties are thereby increased as compared with other routes. This line, it may be anticipated, will pass through the eastern districts of Otago and Canterbury, in the southern part of the island, and through the western district of Nelson, in the northern part, involving the crossing of the mountains somewhere in the north part of the Province of Canterbury. By this route communication would be established between the principal agricultural or producing districts, and the mineral districts, where there will be a consuming population.

A Report was drawn up by Mr. Burns and Mr. Tancred, and adopted.

The Committee then adjourned *sine die*.